

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Matthew Koziarz on 8/4/2011..

The application has been amended as follows:

1-5. (Canceled).

6. (Currently Amended) A method of manufacturing an aircraft fuel deoxygenator including a non-porous membrane, the method comprising the steps of:

forming a first membrane layer in a first coating process by drying a first solution in a first drying process;

forming a second membrane layer on top of the first membrane layer in a second coating process by drying a second solution in a second drying process, the second membrane layer and the first membrane layer form a non-porous membrane; and

disposing said non-porous membrane in a fluid separating device, wherein said fluid separating device is a fuel deoxygenator of an aircraft.

7. (Previously Presented) The method as recited in claim 6, including the step of disposing the non-porous membrane on a substrate.

8. (Previously Presented) The method as recited in claim 6, including the step of forming a partially dissolved portion of the first membrane layer by partially dissolving the first membrane layer with the second solution so that the second membrane layer forms a single homogenous non-porous membrane with the first membrane layer after the second drying process.

9. (Previously Presented) The method as recited in claim 6, wherein the first solution comprises an amorphous glassy perfluorodioxole copolymer dissolved in a fluorosolvent that has a boiling point between 60°C and 110°C.

10. (Previously Presented) The method as recited in claim 6, wherein the second solution comprises an amorphous glassy perfluorodioxole copolymer dissolved in a fluorosolvent that has a boiling point between about 60°C and about 110°C.

11. (Previously Presented) The method as recited in claim 6, wherein said first drying process includes the step of heating to between about 130°C and about 150°C for between 10 minutes and about 30 minutes.

12. (Previously Presented) The method as recited in claim 6, wherein said second drying process includes the step of heating to between about 130°C and about 150°C for between 10 minutes and about 30 minutes.

13. (Previously Presented) The method as recited in claim 6, wherein said first coating process includes rolling said first solution onto said substrate.

14. (Previously Presented) The method as recited in claim 6, wherein said second coating process includes rolling said second solution on top of said first membrane layer after said first drying process.

15. - 22. (Canceled)

23. (Previously Presented) The method as recited in claim 6, further comprising forming the first membrane layer with a thickness of about one micrometer and forming the second membrane layer with a thickness of about one micrometer.

24. (Previously Presented) The method as recited in claim 6, wherein the first drying process occurs before the second coating process.

25. (Previously Presented) The method as recited in claim 6, further comprising forming a seamless boundary between the first membrane layer having a thickness of about one micrometer and the second membrane layer having a thickness of about one micrometer.

26. (Previously Presented) The method as recited in claim 6, wherein the first solution and the second solution are equivalent to form the first membrane layer and the second membrane layer of a single type of polymer.

#### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: claims 6-14 and 23-26 are allowed over the prior art of record. Claim 6 is amended to include the limitation of claim 15, which rejection was reversed by the Board (see decision of

5/31/2011, and to direct the claim to the "method of manufacturing an aircraft fuel deoxygenator including a non-porous membrane". Claim 6 describes the non-porous membrane as the membrane resulting from the included process of making limitations. The non-porous membrane and method of making the membrane is known in the art, as affirmed by the above decision. The process of using the membrane in a deoxygenator of an aircraft, as reflected in the manufacturing process of claim 6, is not suggested in WO'739, which teaches the membrane and process of making the membrane. Claims 7-14, and 23-26 are directed to the method of manufacturing, which includes the steps of making the membrane.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANA FORTUNA whose telephone number is (571)272-1141. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on 571-272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANA M FORTUNA/  
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